In the Claims

1-44 (canceled).

45 (previously presented). An isolated or purified polynucleotide:

a) encoding a polypeptide comprising SEQ ID NO: 1;

b) encoding a Human Leukocyte Antigen (HLA) binding fragment of SEQ ID NO: 1, wherein said HLA binding fragment comprises the amino acid sequence selected from Lys-Thr-Asn-Lys-Trp-Glu-Asp-Ile-Tyr (SEQ ID NO:28), Lys-Ser-Ile-Tyr-Ile-Phe-Tyr-Thr-Tyr (SEQ ID NO:29), Gly-Thr-Phe-Thr-Phe-Gln-Asn-Met-Tyr (SEQ ID NO:30), Tyr-Phe-Glu-Cys-Ile-Met-Lys-Leu-Tyr (SEQ ID NO:32), Val-Tyr-Glu-Gly-Lys-Leu-Lys-Lys-Tyr (SEQ ID NO:33), Val-Val-Asp-Leu-Phe-Cys-Gly-Val-Gly-Tyr (SEQ ID NO:34), Phe-Ser-Ser-Ile-Asn-Thr-Tyr-Asp-Tyr (SEQ ID NO:35), Val-Ser-Asn-Val-Glu-Asp-Ser-Asn-Tyr (SEQ ID NO:36), or Asn-Ser-Asn-Tyr-Asn-Lys-Lys-Leu-Tyr (SEQ ID NO:37); or

c) that is complementary along the full length of said polynucleotide of a) or b).

46 (previously presented). The isolated or purified polynucleotide according to claim 45, wherein said polynucleotide encodes said polypeptide comprising SEQ ID NO: 1.

47 (previously presented). The isolated or purified polynucleotide according to claim 45, wherein said polynucleotide encodes said HLA binding fragment.

48 (previously presented). The isolated or purified polynucleotide according to claim 45, wherein said polynucleotide is complementary along the full length of said polynucleotide of a).

49 (previously presented). The isolated or purified polynucleotide according to claim 45, wherein said polynucleotide is complementary along the full length of said polynucleotide of b).

50 (previously presented). A vector comprising a promoter operably linked to a polynucleotide:

a) encoding a polypeptide comprising SEQ ID NO: 1;

b) encoding a Human Leukocyte Antigen (HLA) binding fragment of SEQ ID NO: 1, wherein said HLA binding fragment comprises the amino acid sequence selected from Lys-Thr-Asn-Lys-Trp-Glu-Asp-Ile-Tyr (SEQ ID NO:28), Lys-Ser-Ile-Tyr-Ile-Phe-Tyr-Thr-Tyr (SEQ ID NO:29), Gly-Thr-Phe-Thr-Phe-Gln-Asn-Met-Tyr (SEQ ID NO:30), Tyr-Phe-Glu-Cys-Ile-Met-Lys-Leu-Tyr (SEQ ID NO:32), Val-Tyr-Glu-Gly-Lys-Leu-Lys-Lys-Tyr (SEQ ID NO:33), Val-Val-Asp-Leu-Phe-Cys-Gly-Val-Gly-Tyr (SEQ ID NO:34), Phe-Ser-Ser-Ile-Asn-Thr-Tyr-Asp-Tyr (SEQ ID NO:35), Val-Ser-Asn-Val-Glu-Asp-Ser-Asn-Tyr (SEQ ID NO:36), or Asn-Ser-Asn-Tyr-Asn-Lys-Lys-Leu-Tyr (SEQ ID NO:37); or

c) that is complementary along the full length of said polynucleotide of a) or b).

51 (previously presented). The vector according to claim 50, wherein said polynucleotide encodes said polypeptide comprising SEQ ID NO: 1.

52 (previously presented). The vector according to claim 50, wherein said polynucleotide encodes said HLA binding fragment.

53 (previously presented). The vector according to claim 50, wherein said polynucleotide is complementary along the full length of said polynucleotide of a).

54 (previously presented). The vector according to claim 50, wherein said polynucleotide is complementary along the full length of said polynucleotide of b).

55 (previously presented). An isolated transformed host cell comprising a polynucleotide:

a) encoding a polypeptide comprising SEQ ID NO: 1;

b) encoding a Human Leukocyte Antigen (HLA) binding fragment of SEQ ID NO: 1, wherein said HLA binding fragment comprises the amino acid sequence selected from Lys-

Thr-Asn-Lys-Trp-Glu-Asp-Ile-Tyr (SEQ ID NO:28), Lys-Ser-Ile-Tyr-Ile-Phe-Tyr-Thr-Tyr (SEQ ID NO:29), Gly-Thr-Phe-Thr-Phe-Gln-Asn-Met-Tyr (SEQ ID NO:30), Tyr-Phe-Glu-Cys-Ile-Met-Lys-Leu-Tyr (SEQ ID NO:32), Val-Tyr-Glu-Gly-Lys-Leu-Lys-Lys-Tyr (SEQ ID NO:33), Val-Val-Asp-Leu-Phe-Cys-Gly-Val-Gly-Tyr (SEQ ID NO:34), Phe-Ser-Ser-Ile-Asn-Thr-Tyr-Asp-Tyr (SEQ ID NO:35), Val-Ser-Asn-Val-Glu-Asp-Ser-Asn-Tyr (SEQ ID NO:36), or Asn-Ser-Asn-Tyr-Asn-Lys-Lys-Leu-Tyr (SEQ ID NO:37); or

c) that is complementary along the full length of said polynucleotide of a) or b).

56 (previously presented). The isolated transformed host cell according to claim 55, wherein said polynucleotide encodes said polypeptide comprising SEQ ID NO: 1.

57 (previously presented). The isolated transformed host cell according to claim 55, wherein said polynucleotide encodes said HLA binding fragment.

58 (previously presented). The isolated transformed host cell according to claim 55, wherein said polynucleotide is complementary along the full length of said polynucleotide of a).

59 (previously presented). The isolated transformed host cell according to claim 55, wherein said polynucleotide is complementary along the full length of the polynucleotide of b).

60 (previously presented). The isolated transformed host cell according to claim 55, wherein said polynucleotide is a vector comprising a promoter operably linked to a polynucleotide:

a) encoding a polypeptide comprising SEQ ID NO: 1;

b) encoding a Human Leukocyte Antigen (HLA) binding fragment of SEQ ID NO: 1, wherein said HLA binding fragment comprises the amino acid sequence selected from Lys-Thr-Asn-Lys-Trp-Glu-Asp-Ile-Tyr (SEQ ID NO:28), Lys-Ser-Ile-Tyr-Ile-Phe-Tyr-Thr-Tyr (SEQ ID NO:29), Gly-Thr-Phe-Thr-Phe-Gln-Asn-Met-Tyr (SEQ ID NO:30), Tyr-Phe-Glu-Cys-Ile-Met-Lys-Leu-Tyr (SEQ ID NO:32), Val-Tyr-Glu-Gly-Lys-Leu-Lys-Lys-Tyr (SEQ ID NO:33), Val-Val-Asp-Leu-Phe-Cys-Gly-Val-Gly-Tyr (SEQ ID NO:34), Phe-Ser-Ser-Ile-Asn-Thr-Tyr-Asp-Tyr (SEQ ID

NO:35), Val-Ser-Asn-Val-Glu-Asp-Ser-Asn-Tyr (SEQ ID NO:36), or Asn-Ser-Asn-Tyr-Asn-Lys-Lys-Leu-Tyr (SEQ ID NO:37); or

c) that is complementary along the full length of said polynucleotide of a) or b).

61 (previously presented). The isolated transformed host cell according to claim 60, wherein said polynucleotide encodes said polypeptide comprising SEQ ID NO: 1.

62 (previously presented). The isolated transformed host cell according to claim 60, wherein said polynucleotide encodes said HLA binding fragment.

63 (previously presented). The isolated transformed host cell according to claim 60, wherein said polynucleotide is complementary along the full length of said polynucleotide of a).

64 (previously presented). The isolated transformed host cell according to claim 60, wherein said polynucleotide is complementary along the full length of said polynucleotide of b).

65 (previously presented). A method of making a polypeptide comprising culturing an isolated transformed host cell according to claim 55 under conditions that allow for the production of said polypeptide.

66-69 (canceled).

70 (previously presented). The isolated or purified polynucleotide according to claim 45, wherein said polynucleotide encodes said HLA binding fragment, and wherein said HLA binding fragment has a length selected from the group consisting of 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, and 35 amino acids.

71 (previously presented). The vector according to claim 50, wherein said polynucleotide encodes said HLA binding fragment, and wherein said HLA binding fragment has a length selected

from the group consisting of 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, and 35 amino acids.

72 (previously presented). The isolated transformed host cell according to claim 55, wherein said polynucleotide encodes said HLA binding fragment, and wherein said HLA binding fragment has a length selected from the group consisting of 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, and 35 amino acids.

73 (previously presented). The isolated transformed host cell according to claim 60, wherein said polynucleotide encodes said HLA binding fragment, and wherein said HLA binding fragment has a length selected from the group consisting of 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, and 35 amino acids.

74 (previously presented). The isolated or purified polynucleotide according to claim 45, wherein said polynucleotide encodes said HLA binding fragment, and wherein said HLA binding fragment consists of the amino acid sequence selected from Lys-Thr-Asn-Lys-Trp-Glu-Asp-Ile-Tyr (SEQ ID NO:28), Lys-Ser-Ile-Tyr-Ile-Phe-Tyr-Thr-Tyr (SEQ ID NO:29), Gly-Thr-Phe-Thr-Phe-Gln-Asn-Met-Tyr (SEQ ID NO:30), Tyr-Phe-Glu-Cys-Ile-Met-Lys-Leu-Tyr (SEQ ID NO:32), Val-Tyr-Glu-Gly-Lys-Leu-Lys-Lys-Tyr (SEQ ID NO:33), Val-Val-Asp-Leu-Phe-Cys-Gly-Val-Gly-Tyr (SEQ ID NO:34), Phe-Ser-Ser-Ile-Asn-Thr-Tyr-Asp-Tyr (SEQ ID NO:35), Val-Ser-Asn-Val-Glu-Asp-Ser-Asn-Tyr (SEQ ID NO:36), or Asn-Ser-Asn-Tyr-Asn-Lys-Lys-Leu-Tyr (SEQ ID NO:37).

75 (previously presented). The vector according to claim 50, wherein said polynucleotide encodes said HLA binding fragment, and wherein said HLA binding fragment consists of the amino acid sequence selected from Lys-Thr-Asn-Lys-Trp-Glu-Asp-Ile-Tyr (SEQ ID NO:28), Lys-Ser-Ile-Tyr-Ile-Phe-Tyr-Thr-Tyr (SEQ ID NO:29), Gly-Thr-Phe-Thr-Phe-Gln-Asn-Met-Tyr (SEQ ID NO:30), Tyr-Phe-Glu-Cys-Ile-Met-Lys-Leu-Tyr (SEQ ID NO:32), Val-Tyr-Glu-Gly-Lys-Leu-Lys-Lys-Tyr (SEQ ID NO:33), Val-Val-Asp-Leu-Phe-Cys-Gly-Val-Gly-Tyr (SEQ ID NO:34), Phe-Ser-Ser-Ile-Asn-Thr-Tyr-Asp-Tyr (SEQ ID NO:35), Val-Ser-Asn-Val-Glu-Asp-Ser-Asn-Tyr (SEQ ID

NO:36), or Asn-Ser-Asn-Tyr-Asn-Lys-Lys-Leu-Tyr (SEQ ID NO:37).

76 (previously presented). The isolated transformed host cell according to claim 55, wherein said polynucleotide encodes said HLA binding fragment, and wherein said HLA binding fragment consists of the amino acid sequence selected from Lys-Thr-Asn-Lys-Trp-Glu-Asp-Ile-Tyr (SEQ ID NO:28), Lys-Ser-Ile-Tyr-Ile-Phe-Tyr-Thr-Tyr (SEQ ID NO:29), Gly-Thr-Phe-Thr-Phe-Gln-Asn-Met-Tyr (SEQ ID NO:30), Tyr-Phe-Glu-Cys-Ile-Met-Lys-Leu-Tyr (SEQ ID NO:32), Val-Tyr-Glu-Gly-Lys-Leu-Lys-Lys-Tyr (SEQ ID NO:33), Val-Val-Asp-Leu-Phe-Cys-Gly-Val-Gly-Tyr (SEQ ID NO:34), Phe-Ser-Ser-Ile-Asn-Thr-Tyr-Asp-Tyr (SEQ ID NO:35), Val-Ser-Asn-Val-Glu-Asp-Ser-Asn-Tyr (SEQ ID NO:36), or Asn-Ser-Asn-Tyr-Asn-Lys-Lys-Leu-Tyr (SEQ ID NO:37).

77 (previously presented). The isolated transformed host cell according to claim 60, wherein said polynucleotide encodes said HLA binding fragment, and wherein said HLA binding fragment consists of the amino acid sequence selected from Lys-Thr-Asn-Lys-Trp-Glu-Asp-Ile-Tyr (SEQ ID NO:28), Lys-Ser-Ile-Tyr-Ile-Phe-Tyr-Thr-Tyr (SEQ ID NO:29), Gly-Thr-Phe-Thr-Phe-Gln-Asn-Met-Tyr (SEQ ID NO:30), Tyr-Phe-Glu-Cys-Ile-Met-Lys-Leu-Tyr (SEQ ID NO:32), Val-Tyr-Glu-Gly-Lys-Leu-Lys-Lys-Tyr (SEQ ID NO:33), Val-Val-Asp-Leu-Phe-Cys-Gly-Val-Gly-Tyr (SEQ ID NO:34), Phe-Ser-Ser-Ile-Asn-Thr-Tyr-Asp-Tyr (SEQ ID NO:35), Val-Ser-Asn-Val-Glu-Asp-Ser-Asn-Tyr (SEQ ID NO:36), or Asn-Ser-Asn-Tyr-Asn-Lys-Lys-Leu-Tyr (SEQ ID NO:37).

78 (new). The isolated or purified polynucleotide according to claim 45, wherein said polynucleotide encodes said HLA binding fragment or is complementary along the full length of said polynucleotide of b), and wherein said HLA binding fragment comprises Lys-Thr-Asn-Lys-Trp-Glu-Asp-Ile-Tyr (SEQ ID NO:28).

79 (new). The isolated or purified polynucleotide according to claim 45, wherein said polynucleotide encodes said HLA binding fragment or is complementary along the full length of said polynucleotide of b), and wherein said HLA binding fragment comprises Lys-Ser-Ile-Tyr-Ile-Phe-Tyr-Thr-Tyr (SEQ ID NO:29).

80 (new). The isolated or purified polynucleotide according to claim 45, wherein said polynucleotide encodes said HLA binding fragment or is complementary along the full length of said polynucleotide of b), and wherein said HLA binding fragment comprises Gly-Thr-Phe-Thr-Phe-Gln-Asn-Met-Tyr (SEQ ID NO:30).

81 (new). The isolated or purified polynucleotide according to claim 45, wherein said polynucleotide encodes said HLA binding fragment or is complementary along the full length of said polynucleotide of b), and wherein said HLA binding fragment comprises Tyr-Phe-Glu-Cys-Ile-Met-Lys-Leu-Tyr (SEQ ID NO:32).

82 (new). The isolated or purified polynucleotide according to claim 45, wherein said polynucleotide encodes said HLA binding fragment or is complementary along the full length of said polynucleotide of b), and wherein said HLA binding fragment comprises Val-Tyr-Glu-Gly-Lys-Leu-Lys-Lys-Tyr (SEQ ID NO:33).

83 (new). The isolated or purified polynucleotide according to claim 45, wherein said polynucleotide encodes said HLA binding fragment or is complementary along the full length of said polynucleotide of b), and wherein said HLA binding fragment comprises Val-Val-Asp-Leu-Phe-Cys-Gly-Val-Gly-Tyr (SEQ ID NO:34).

84 (new). The isolated or purified polynucleotide according to claim 45, wherein said polynucleotide encodes said HLA binding fragment or is complementary along the full length of said polynucleotide of b), and wherein said HLA binding fragment comprises Phe-Ser-Ser-Ile-Asn-Thr-Tyr-Asp-Tyr (SEQ ID NO:35).

85 (new). The isolated or purified polynucleotide according to claim 45, wherein said polynucleotide encodes said HLA binding fragment or is complementary along the full length of said polynucleotide of b), and wherein said HLA binding fragment comprises Val-Ser-Asn-Val-Glu-Asp-Ser-Asn-Tyr (SEQ ID NO:36).

86 (new). The isolated or purified polynucleotide according to claim 45, wherein said polynucleotide encodes said HLA binding fragment or is complementary along the full length of said polynucleotide of b), and wherein said HLA binding fragment comprises Asn-Ser-Asn-Tyr-Asn-Lys-Lys-Leu-Tyr (SEQ ID NO:37).